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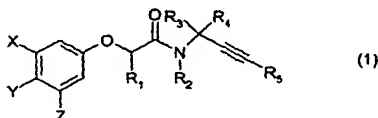
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(54) Title: **FUNGICIDES**



(57) Abstract: Fungicidal compounds of the general formula (1): wherein X, Y and Z are independently H, halogen, C<sub>1-4</sub> alkyl, halo(C<sub>1-4</sub>)alkyl, C<sub>2-4</sub> alkenyl, halo(C<sub>2-4</sub>)alkenyl, C<sub>2-4</sub> alkynyl, halo(C<sub>2-4</sub>)alkynyl, C<sub>1-4</sub> alkoxy, halo(C<sub>1-4</sub>)alkoxy, -S(O)<sub>n</sub>(C<sub>1-4</sub>)alkyl where n is 0, 1 or 2 and the alkyl group is optionally substituted with fluoro, -OSO<sub>2</sub>(C<sub>1-4</sub>)alkyl where the alkyl group is optionally substituted with fluoro, cyano, nitro, C<sub>1-4</sub> alkoxy, carbonyl, -CONR'<sup>n</sup>, -COR', -NR'<sup>n</sup>COR'' or -NR'<sup>n</sup>COOR''' where R' and R'' are independently H or C<sub>1-4</sub> alkyl and R''' is C<sub>1-4</sub> alkyl, provided that at least one of X and Z is other than H; R<sub>1</sub> is C<sub>1-4</sub> alkyl, C<sub>2-4</sub> alkenyl or C<sub>2-4</sub> alkynyl in which the alkyl, alkenyl and alkynyl groups are optionally substituted on their terminal carbon atom with one, two or three halogen atoms, with a cyano group, with a C<sub>1-4</sub> alkylcarbonyl group, with a C<sub>1-4</sub> alkoxy, carbonyl group or with a hydroxy group; R<sub>2</sub> is H, C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, methyl or benzyloxymethyl in which the phenyl ring of the benzyloxy moiety is optionally substituted with C<sub>1-4</sub>alkoxy; R<sub>3</sub> and R<sub>4</sub> are independently H, C<sub>1-3</sub> alkyl, C<sub>2-3</sub> alkenyl or C<sub>2-3</sub> alkynyl provided that both are not H and that when both are other than H their combined total of carbon atoms does not exceed 4, or R<sub>3</sub> and R<sub>4</sub> join with the carbon atom to which they are attached to form a 3 or 4 membered carbocyclic ring optionally containing one O, S or N atom and optionally substituted with halo or C<sub>1-4</sub>alkyl; and R<sub>5</sub> is unsubstituted C<sub>3-4</sub> alkyl, unsubstituted C<sub>3-6</sub> cycloalkyl or C<sub>1-4</sub> alkyl or C<sub>3-6</sub> cycloalkyl in which the alkyl and cycloalkyl groups are substituted with halo, hydroxy, C<sub>1-6</sub> alkoxy, cyano, C<sub>1-4</sub> alkylcarbonyloxy, aminocarbonyloxy, mono- or di(C<sub>1-4</sub>)alkylaminocarbonyloxy, -S(O)<sup>n</sup>(C<sub>1-6</sub>)alkyl where n is 0, 1 or 2, triazolyl, tri(C<sub>1-4</sub>)alkylsilyloxy, optionally substituted phenoxy, optionally substituted thienyloxy, optionally substituted benzyloxy or optionally substituted thienyl-methoxy, in which the optionally substituted phenyl and thienyl rings of phenoxy, thienyloxy, benzyloxy and thienylmethoxy are optionally substituted with one, two or three substituents selected from halo, hydroxy, mercapto, C<sub>1-4</sub> alkyl, C<sub>2-4</sub> alkenyl, C<sub>2-4</sub> alkynyl, C<sub>1-4</sub> alkoxy, C<sub>2-4</sub> alkenyloxy, C<sub>2-4</sub> alkynyloxy, halo(C<sub>1-4</sub>)alkyl, halo(C<sub>1-4</sub>)alkoxy, C<sub>1-4</sub> alkylthio; halo(C<sub>1-4</sub>)alkylthio, hydroxy(C<sub>1-4</sub>)alkyl, C<sub>1-4</sub> alkoxy(C<sub>1-4</sub>)alkyl, C<sub>3-6</sub> cycloalkyl, C<sub>3-6</sub> cycloalkyl(C<sub>1-4</sub>)alkyl, phenoxy, benzyloxy, benzoyloxy, cyano, isocyano, thiocyanato, isothiocyanato, nitro, -NR'<sup>n</sup>, -NHCOR<sup>m</sup>, -NHCONR<sup>m</sup>R'', -CONR<sup>m</sup>R'', -SO<sub>2</sub>R<sup>m</sup>, -OSO<sub>2</sub>R<sup>m</sup>, -COR<sup>m</sup>, -CR<sup>m</sup>=NR'' or -N=CR<sup>m</sup>R'', in which R'' and R'' are independently hydrogen, C<sub>1-4</sub> alkyl, halo(C<sub>1-4</sub>)alkyl, C<sub>1-4</sub> alkoxy, halo(C<sub>1-4</sub>)alkoxy, C<sub>1-4</sub> alkylthio, C<sub>3-6</sub> cycloalkyl, C<sub>3-6</sub> cycloalkyl(C<sub>1-4</sub>)alkyl, phenyl or benzyl, the phenyl and benzyl groups being optionally substituted with halogen, C<sub>1-4</sub>alkyl or C<sub>1-4</sub>alkoxy.

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